# Trucker Survey Report **181**



# Interstate 81 Improvement Studies

The Virginia Department of Transportation has begun a major effort to plan and design road improvements for Interstate 81. Most notable, the department is in the very early stages of studying I-81 and developing a plan to widen and improve Virginia's segment of the interstate. If approved, the plan could take more than 20 years to carry out.

#### Increasing traffic has led to safety concerns

The increasing traffic volume on I-81 has created safety problems and traffic congestion on the four-lane interstate. I-81, which is 30 years old, is carrying more and heavier vehicles than it was originally designed to handle. Traffic has nearly tripled in 25 years from 2.7 million daily vehicle miles of travel in 1970 to more than eight million in 1995.

Another significant change has been the increase in truck traffic. Originally designed to handle only 15 percent truck traffic, the aging interstate now carries anywhere from 19 to 40 percent truck traffic, depending on the location. Truck traffic is expected to continue growing as American businesses increase their reliance on trucks to transport goods.



Survey of truck drivers conducted to determine truck needs

Recognizing the increasing growth of large truck traffic on I-81 and the different needs that large trucks have from smaller vehicles, the Virginia Department of Transportation commissioned a study to identify the needs and concems of the truck drivers who use I-81. Over 1300 truck drivers were interviewed at rest stops and commercial truckstops along I-81 throughout Virginia. This report presents the findings from these interviews.

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Approximately half of the trips started and ended in these four mid-Atlantic states. The remainder of the responses were distributed throughout North America.

#### Where did you enter and exit I-81?

The majority of truck traffic enters and leaves I-81 at I-40 in Tennessee and at I-77 South in Fort Chiswell, Virginia. 40

SOUTH INTERSTATE 77

All other responses were distributed throughout the I-81 Corridor.

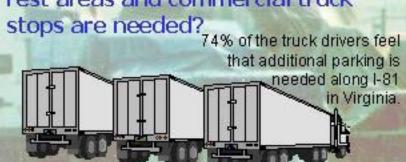
# What interchanges are difficult to navigate?

The most difficult interchanges include:

- Exit 150, Route 220 (Troutville)
- Exit 72, I-77 North (Wytheville)
- . Exit 80, I-77 South (Fort Chiswell)
- Exit 243, Route 11 (Harrisonburg)

Each of these interchanges is known to have tight curves within the interchange.

# What improvements to existing rest areas and commercial truck stops are peeded?



Parking was most often requested at Exit 150 (Troutville) and Exit 205 (Raphine).

#### Where are additional rest areas needed?

Exit 150B

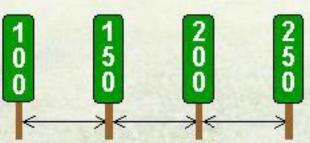
Troutville

Fincastle

1 Mile

11

The majority of truck drivers felt that additional rest areas were most needed between Roanoke and Staunton.



Many individuals also voiced support for Rest Areas to be evenly spaced along I-81 in Virginia.

#### Where do you encounter reduced speeds most frequently?

52% of the truckers interviewed indicated that traffic congestion was the main cause of reduced speeds. Congested areas identified include:

- Roanoke
- Harrisonburg
- · Bristol/Abingdon
- Winchester
- Fort Chiswell/Wytheville

29% indicated
Construction
Zones
cause
reduced
speeds.

14% said that reduced speeds result from long grades.

in Wytheville also cause them to slow down.

### **I-81 Facts**

- AAA voted I-81 as one often most scenic interstates in the U.S. and the only one in the Southeast.
- I-81 starts in Dandridge, Tennessee at the intersection of I-40 and extends through New York to the U.S.-Canada Boarder.
- In Virginia, I-81 is 325 miles long and 30 years old.
- 20,000 to 50,000 vehicles per day travel the interstate; in the last 20 years, traffic has more than doubled, and in urban area, tripled.
- I-81 was designed to carry only 15% trucks, but currently services 19% to 40% truck traffic.
- In Virginia, I-81 travels through 21 cities and towns and 12 counties.
- Between 1991 and 1994, there were 68 work zone accidents.
   The top causes of these accidents were "driver inattention" and "exceeding safe speed limit".
- 35% of fatal accidents on I-81 involved a truck.

Sources: Virginia Department of Transportation, Virginia Tech Center for Transportation Research



### What safety concerns about I-81 do you have?



33% of truck drivers interviewed indicated safety concerns with exit and entrance ramps are their primary concern.

The issues involved here include:

- short acceleration lanes to merge with moving traffic
- short deceleration lanes to slow down for ramps
- tight turning movements within the ramps
- tight turning movements at intersections at the ends of ramps

### Do you have any other concerns about I-81?

The truckers most frequent response was that they enjoy traveling I-81 because of its scenic beauty and its high quality.

Other concerns included the need for additional lanes, the lack of sufficient parking, an

lanes, the lack of sufficient parking, and the condition of the roadway pavement.

## What type of cargo are you carrying?

	Household Goods - 18%
	General Freight - 16%
	Food - 14%
Cons	truction Materials - 13%
	Paper - 9%
	Raw Materials - 6%
AFF	Automotive - 5%
н	azardous Materials - 4%
	Equipment - 4%
	Empty - 4%
	Chemicals - 2%
	Feed-Grain - 2%
	Livestock - 1%
	Medical - 1%
	Recycle Materials - 1%